

SUMMARY OF NATIONAL AND INTERNATIONAL MOTORCYCLE SAFETY REGULATIONS AND STANDARDS

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1) OVERVIEW-GROUPINGS OF REGULATIONS AND STANDARDS

I. Regulations

A. National/Regional

- 1. Self-certifying (US, Canada)**
- 2. Homologation (Europe, Japan, Australia)**

B. Worldwide

- 1. Homologation-1958 UN Agreement, ECE (Europe, Japan, Australia)**
- 2. Self-certifying and Homologation-1998 Agreement on Global Technical Regulations (GTR)
(US, Europe, Japan, India and most other nations)**

II. Standards and Recommended Practices

I. National (ANSI/SAE, JASI, CSI, ASI, DIN, etc)

II. International (SAE, ISO)

2) MOTORCYCLE SAFETY-RELATED REGULATIONS

Safety Aspect	Subgroup	UN/ECE EU	US	CND	AUS	Japan	Others
Lighting	Headlamps	R1 R5 R8 R20 R31 R37 (R2) R57* R72* R74* R76* R82* R98 R99 R112 R113	CFR 49 Pt.564 FMVSS1 108 (Refs. SAE J584* SAE J589 SAE J910 SAE J1383) ↓	CMVSS 108 CMVSS 108.1 (Refs. J584* SAE J1383) ↓	ADR 45/01 ADR 55/00 ADR 46/00 ADR 51/00 ADR 77 ↓	Article 32 Article 62 ↓	
	Reflective devices	R3	FMVSS 108 (Refs. SAE J594f)	CMVSS 108 (Refs. SAE J594f)	ADR 47/00	Article 38 Article 63	
	Direction indicators	R6 R53* R74 R119	FMVSS 108 (Refs. SAE J588)	CMVSS 108 (Refs. SAE J588)	ADR 06/00 ADR 19/02 ADR 53/00	Article 41 Article 63-2	
	Fog lamps	R19 R38	FMVSS 108 (Refs. SAE J583 SAE J1306*)	CMVSS 108	ADR 50/00 ADR 52/00	Article 33	
	Daytime running lamps	R87				Article 32 Article 62	
	Other illumination	R37 R50* R74* R77	FMVSS 108 (Refs. SAE J573d SAE J586 SAE J587 SAE J592e)	CMVSS 108 (Refs. SAE J573d SAE J586 SAE J592e)	ADR 01/00 ADR 74/00 ADR 53/00	Article 42 ↓	
	Headlamp cleaners	R45			ADR 75	Article 32	
	Installation				ADR 19/02 ADR 19/01		

* Regulations specifically related to motorcycles

1 FMVSS refers to United States Code of Federal Regulations 49 Part 571

2) MOTORCYCLE SAFETY-RELATED REGULATIONS (CONT'D)

Safety Aspect	Subgroup	UN/ECE EU	US	CND	AUS	Japan	Others
Brakes	Brake hoses		FMVSS 106	CMVSS 106	ADR 42/04	Article 12 Article 61	
	Brake fluids		FMVSS 116	CMVSS 116			
	Brake performance	R78*	FMVSS 122*	CMVSS 122	ADR 33/00		
Field of view	Rear-view mirrors	R81*	FMVSS 111 (Refs. SAE J268)	CMVSS 111	ADR 14/02	Article 44 Article 64-2	
Tires and wheels	Performance	R75*	FMVSS 119		ADR 42/04	Article 7 Article 60 ↓	
	Marking						
	Selection requirements		FMVSS 120	CMVSS 120 CMVSS 110	ADR 42/04 (Refs. JIS D4202 JIS D4218)		
	Retro-reflective tires	R88*					
	Wheel coverage				ADR 42/04		
Controls and displays	Location		FMVSS 123* ↓	CMVSS 123 ↓	ADR 18/02 ADR 18/00 ADR 18/01 ADR 18/03	Article 10 ↓	
	Operation						
	Identification	R60*			ADR 57/00		
	Illumination						
	Stands and footrests						
	Speedometer	R39			ADR 18/02	Article 46 Article 65-2	

* Regulations specifically related to motorcycles

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2) MOTORCYCLE SAFETY-RELATED REGULATIONS (CONT'D)

Safety Aspect	Subgroup	UN/ECE EU	US	CND	AUS	Japan	Others
Head/eye protection		R22 Type A ECE 22.05 (Eur)	FMVSS 218*	CSA CAN3-D230-M85	AS 1698-1988		
Glazing Materials		R43	FMVSS 205	CMVSS 205	ADR 08/01		
Fuel system	System integrity	97/24/EC*		CMVSS 301.3 (Refs. SAE J1241)			
Dimensions					ADR 43/04 ADR 43/01 ADR 43/02 ADR 43/03		
Aural alert	Horns				ADR 42/04		
Vehicle stability	3 wheeled vehicles				ADR 42/04		
External projections		97/24/EC*			ADR 42/04		New Zealand 32008/1

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3) RECOMMENDED STANDARDS AND PRACTICES

Safety Aspect	Subgroup	SAE	ISO	BSI	JIS	Others
Lighting	Headlamps	J584* J589 J910 J1383 J1577	11460:1993 ↓			
	Reflective Devices	J594f				
	Direction Indicators	J131 J588				GB ² 17510-1998
	Fog Lamps	J583				
	Other Illumination	J222 J573d J585e J586 J587 J1306*				
	Headlamp Cleaners	J2111	3267:1991		D 5715:1993	KSA ¹ R 4043
	Installation	J2442				
Brakes	Brake Hose	J1401	3996:1995 6120:1995			MIL-PRF-13719E(1)
	Brake Fluid	J1703 J1704 J1705	4925:2005			
	Performance	J109				
Field of View	Rear View Mirrors	J268				

3) RECOMMENDED STANDARDS AND PRACTICES (CONT'D)

Safety Aspect	Subgroup	SAE	ISO	BSI	JIS	Others
Tires and Wheels	Performance					
	Selection		4249-1:1985 4249-3:2004		D4202 D4215 D4218 K6366	DIN7816
Side stand	Retraction	J1579				
	Parking stability	J1101 J1248	9565:1990			
Fuel System	System Integrity	J1241				GB 19482-2004
Aural alert	Horns	J377				
Controls and displays	Location	J107	9021:1988			GB/T 15366-1994
	Identification	J107	6727:1981			GB 15365-1994
	Speedometer	J1226 J678				DIN 75521-1
Head/Eye Protection				BSI-6658-85 (UK)	T 8133:2000	CEN EN1938 GB 811-1998
Electrical	Electrical Systems	J392				
	Stop lamp switch	J1167				
Field of view	Rear view mirrors	J268				KSA R 4066 GB 17352-1998

4) UN/ECE MOTORCYCLE SAFETY-RELATED REGULATIONS

Number	Title
Regulation No. 1	Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam and/or a driving beam and equipped with filament lamps of category R2.
Regulation No. 2	Uniform provisions concerning the approval of incandescent electric lamps for headlamps emitting an asymmetrical passing beam or a driving beam or both.
Regulation No. 3	Uniform provisions concerning the approval of retro-reflecting devices for power-driven vehicles and their trailers
Regulation No. 5	Uniform provisions for the approval of motor vehicle "sealed beam" headlamps (SB) emitting a European asymmetrical passing beam or a driving beam or both.
Regulation No. 6	Uniform provisions concerning the approval of direction indicators for motor vehicles and their trailers
Regulation No. 8	Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with halogen filament lamps (H1, H2, H3, HB3, HB4, H7, H8, H9, HIR1, HIR2 and/or H11)
Regulation No. 19	Uniform provisions concerning the approval of motor vehicle fog lamps
Regulation No. 20	Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with halogen filament lamps (H4 lamps)
Regulation No. 22	Uniform provisions concerning the approval of protective helmets and their visors for drivers and passengers of motor cycles and mopeds
Regulation No. 31	Uniform provisions concerning the approval of halogen sealed-beam unit (HSB unit) motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both
Regulation No. 37	Uniform provisions concerning the approval of filament lamps for use in approved lamp units of power-driven vehicles and of their trailers

4) UN/ECE MOTORCYCLE SAFETY-RELATED REGULATIONS (CONT'D)

Number	Title
Regulation No. 38	Uniform provisions concerning the approval of rear fog lamps for power-driven vehicles and their trailers
Regulation No. 39	Uniform provisions concerning the approval of vehicles with regard to the speedometer equipment including its installation
Regulation No. 43	Uniform provisions concerning the approval of safety glazing materials and their installation of vehicles
Regulation No. 45	Uniform provisions concerning the approval of headlamp cleaners, and of power-driven vehicles with regard to headlamp cleaners
Regulation No. 50	Uniform provisions concerning the approval of front position lamps, rear position lamps, stop lamps, direction indicators and rear-registration-plate illuminating devices for mopeds, motor cycles and vehicles treated as such
Regulation No. 53	Uniform provisions concerning the approval of category L3 vehicles with regard to the installation of lighting and light-signaling devices
Regulation No. 57	Uniform provisions concerning the approval of headlamps for motor cycles and vehicles treated as such
Regulation No. 60	Uniform provisions concerning the approval of two-wheeled motor cycles and mopeds with regard to driver-operated controls including the identification of controls, tell-tales and indicators
Regulation No. 62	Uniform provisions concerning the approval of power-driven vehicles with handlebars with regard to their protection against unauthorized use
Regulation No. 72	Uniform provisions concerning the approval of motor cycle headlamps emitting an asymmetrical passing beam and a driving beam and equipped with halogen lamps (HS1 lamps)
Regulation No. 74	Uniform provisions concerning the approval of category L1 vehicles with regard to the installation of lighting and light-signaling devices

4) **UN/ECE MOTORCYCLE SAFETY-RELATED REGULATIONS (CONT'D)**

Number	Title
Regulation No. 75	Uniform provisions concerning the approval of pneumatic tyres for motor cycles and mopeds
Regulation No. 76	Uniform provisions concerning the approval of headlamps for mopeds emitting a driving beam and a passing beam
Regulation No. 77	Uniform provisions concerning the approval of parking lamps for power-driven vehicles
Regulation No. 78	Uniform provisions concerning the approval of vehicles of category L with regard to braking
Regulation No. 81	Uniform provisions concerning the approval of rear-view mirrors of two-wheeled power-driven vehicles with or without side car, with regard to the mounting of rear-view mirrors on handlebars
Regulation No. 82	Uniform provisions concerning the approval of moped headlamps equipped with filament halogen lamps (HS2)
Regulation No. 87	Uniform provisions concerning the approval of daytime running lamps for power-driven vehicles
Regulation No. 88	Uniform provisions concerning the approval of retroreflective tyres for two-wheeled vehicles
Regulation No. 98	Uniform provisions concerning the approval of motor vehicle headlamps equipped with gas-discharge light sources
Regulation No. 99	Uniform provisions concerning the approval of gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles
Regulation No. 112	Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps
Regulation No. 113	Uniform provisions concerning the approval of motor vehicle headlamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament lamps
Regulation No. 119	Uniform provisions concerning the approval of cornering lamps for power-driven vehicles

5) US MOTORCYCLE SAFETY-RELATED REGULATIONS

Number	Title
49 CFR 571.106	Brake Hoses
49 CFR 571.108	Lamps, reflective devices, and associated equipment
49 CFR 571.111	Rearview mirrors
49 CFR 571.116	Motor vehicle brake fluids
49 CFR 571.119	New pneumatic tires for vehicles other than passenger cars
49 CFR 571.120	Tire selection and rims for motor vehicles other than passenger cars
49 CFR 571.122	Motorcycle brake systems
49 CFR 571.123	Motorcycle controls and displays
49 CFR 571.205	Glazing materials
49 CFR 571.218	Motorcycle helmets

6) OVERVIEW OF UN GLOBAL TECHNICAL REGULATIONS (GTR) AND DRAFT GTR ON MOTORCYCLE BRAKES

United Nations 1998 Agreement on Global Technical Regulations

UNITED
NATIONS

E



Economic and Social
Council

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ENGLISH
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ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

GUIDELINES REGARDING PROPOSING AND DEVELOPING
OF GLOBAL TECHNICAL REGULATIONS (gtr)

Globally harmonized regulations with benefits for:

- Consumers (lower product costs)
- Industry and labor (standardized products and components for all markets; enhances global competitiveness)

6) OVERVIEW OF UN GLOBAL TECHNICAL REGULATIONS (GTR) AND DRAFT GTR ON MOTORCYCLE BRAKES (CONT'D)

Process:

- Proposed GTR is submitted by signatory nation

The GR develops the draft regulation, giving consideration to the objective of the proposed global technical regulations and the need to establish alternative levels of stringency or performance. In the case of a harmonized gtr, the Working Party must review all technical regulations in the Compendium of Candidates and any ECE Regulations addressing the same elements of performance, and must review any available relevant assessments of functional equivalence. In the case of a new gtr, the Working Party must give consideration to the technical and economic feasibility, the benefits and potential cost effectiveness, including those of any alternative regulatory requirements and approaches. (See Articles 6.2.4.1.1. - 6.2.4.1.6. and 6.3.4.1.1. - 6.3.4.1.7. of the 1998 Agreement.)

- * Once consensus is reached, the Chairman submits a final report and a draft regulation to AC.3
- * Per the provisions of the 1998 Agreement, the report must contain: (1) a recommendation regarding the new global technical regulation, including all technical data and information that were considered in the development of its recommendation, (2) a description of its consideration of the information specified in paragraph 6.2.4.1. and 6.3.4.1. of the 1998 Agreement, and (3) the rationale for its recommendations, including an explanation for rejecting any alternative regulatory requirements and approaches considered.

- Once approved, each nation agrees to submit GTR to its normal rulemaking process, for possible national implementation

6) OVERVIEW OF UN GLOBAL TECHNICAL REGULATIONS (GTR) AND DRAFT GTR ON MOTORCYCLE BRAKES (CONT'D)

Draft GTR on Motorcycle Brakes

- Informal Working Group (US, Canada, Italy, Japan, Netherlands, UK, Industry met over 4 year period
- Drafted:
 - Inventory of existing Regulations
 - Comparison of severity of each of about 80 provisions
 - Adopted “most severe” provision, condition, procedure from each region’s MC brake regulation
 - Prepared draft GTR
 - Note: historical rationale for many national (e.g., US) provisions could not be identified, making work of the IWG more difficult than it might have been.
- Motorcycle Brake GTR will be among first two GTRs voted on by UN, and if approved, submitted to US rulemaking process